

## **Attachment 1**

### **GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION**

#### ***Abbreviations and Acronyms***

**30 SW**—30th Space Wing  
**30 SW/CP**—Command Post  
**30 SW/PA**—Public Affairs  
**30 SW/SE**—Safety  
**30 SW/SEGP**—Pad Safety  
**30 AMDS**—30th Aerospace Medicine  
**30 AMDS/SGPB**—Bioenvironmental Engineering  
**30 CES**—30th Civil Engineer Squadron  
**30 CES/CED**—Explosive Ordnance Disposal  
**30 CES/CEF**—Fire Protection  
**30 CES/CEO**—Operations Flight  
**30 CES/CEX**—Readiness Flight  
**30 CS**—30th Communications Squadron  
**30 CS/CCE**—Executive Services  
**30 CS/SCSVMI**—Instrumentation Section  
**30 RANS**—30th Range Squadron  
**30 RANS/DOO**—Range Current Operations  
**30 SFS**—30th Security Forces Squadron  
**30 SFS/SFOS-M**—Missile Operations Support  
**30 SPTG**—30th Support Group  
**30 SPTG/CC**—Support Group Commander  
**30 TRNS**—30th Transportation Squadron  
**30 TRNS/LGTO**—Vehicle Operations Flight  
**30 WS**—30th Weather Squadron  
**30 WS/DOR**—Range Weather Operations Flight  
**76 HF**—76th Helicopter Flight  
**2 SLS/DO**—2d Space Launch Squadron Operations Branch  
**576 FLTS**—576th Flight Test Squadron  
**576 FLTS/TEE**—Systems Engineering Flight  
**576 FLTS/TMGE**—Electro-Mechanical Team  
**576 FLTS/TMOS**—Scheduling Control Section

**Det 9, SMC**—Detachment 9, Space and Missile Systems Center

**ACO**—Aerospace Control Officer

**AFSPC**—Air Force Space Command

**CDC**—Command Destruct Check

**EAL**—Entry Access List

**EHZ**—Emission Hazard Zone

**EMT**—Electro-Mechanical Team

**ELSA**—Emergency Life Support Apparatus

**EWB**—Eastern and Western Range

**FCA**—Flight Caution Area

**FHA**—Flight Hazard Area

**FDE**—Force Development Evaluation

**IAW**—In Accordance With

**ILL**—Impact Limit Line

**LD**—Launch Director

**LDCG**—Launch Disaster Control Group

**LF**—Launch Facility

**LFT**—Launch Facility Team

**LOB**—Launch Operations Building

**LOCC**—Launch Operations Control Center

**LSP**—Launch Support Plan

**LSSC**—Launch Services Support Contractor

**LDCG**—Launch Disaster Control Group

**MFCO**—Mission Flight Control Officer

**MOS**—Missile Operations Security

**OHZ**—Operational Hazard Zone

**OPR**—Office of Primary Responsibility

**OSC**—On-Scene Commander

**OSM**—Operations Safety Manager

**OST**—Operations Safety Technician

**OT&E**—Operational Test and Evaluation

**PHZ**—Potential Hazard Zone

**POV**—Privately Owned Vehicle

**RHC**—Radiological Hazard Corridor

**ROC**—Range Operations Commander

**ROMSSC**—Range Operations and Maintenance Service Support Contractor

**SERT**—System Engineering Response Team

**SLC**—Space Launch Complex

**SWI**—Space Wing Instruction

**THZ**—Toxic Hazard Zone

**UDS**—Universal Documentation System

**VAFB**—Vandenberg Air Force Base

**WR**—Western Range

### *Terms*

**Aerospace Control Officer (ACO)**—The ACO is the WR representative responsible for ensuring launch area clearance of the public to include people, boats, trains and aircraft during launch operations. The ACO will clear land, air, and sea traffic based on requirements established by the MFCO.

**Abort**—The condition when missile lift-off fails to take place after entry into terminal count because of a deliberate action.

**Cold Spill**—Release of toxic propellants in liquid or vapor form from a propellant transfer or vent operation.

**Danger Area**—A circular controlled surface area centered on the launcher or SLC. Its specific dimensions vary with each missile or space system.

**Disaster Control Group**—This group responds to the scene of a missile accident to provide command and control.

**Entry Access List (EAL)**—The EAL is a by-name request of mission-essential personnel for access into the FHA, FCA, and ILL during launch day. The EAL is prepared by the responsible launch/launch support agencies. The EAL consists of: individual's full name, rank/grade, last six of the Social Security Number (SSAN), location within the controlled area at T-0, and telephone number. The EAL will be submitted to the LDCG Team Chief NLT three duty days prior to launch. The EAL is used by the LDCG element during the launch day to account for personnel within the FHA, FCA, and ILL.

**Emission Hazard Zone (EHZ)**—See Toxic Hazard Zone (THZ) for related definitions.

**Fallback Area**—An area outside the missile FHA activated for all launches. During launch operations, fallback areas are restricted to emergency response personnel and equipment as authorized by the LDCG Team Chief.

**Flight Caution Area (FCA)**—The controlled ground area outside of the FHA where injury or property damage could occur because of a launch vehicle flight failure. The FCA is restricted to only mission-essential personnel during launch operations.

**Flight Hazard Area (FHA)**—The area in which significant danger to personnel and equipment would exist in the event of a malfunction during early phases of launch vehicle flight; the ground and air space extending to an unlimited altitude, including the entire area where the risk of serious injury, death, or substantial property damage is so severe it necessitates exclusion of all personnel and equipment not needed to support the launch operation (nonessential personnel). Personnel required to be in the FHA during launch must be located in blast hardened and approved structures.

**Hangfire**—A condition that exists when the ignition signal is known to have reached an initiator but ignition of the propulsion system is not achieved.

**Hazard Area**—A controlled area where hazardous operations or conditions exist. This area normally extends to the affected LF or SLC perimeter fence. Examples of hazardous operations would be, an igniter installation, fuel load, or destruct package installation, etc. Only essential personnel may enter the area in the event of an anomaly.

**Hazard Period**—The time period during which a hazard area is activated.

**Hardened Shelter**—A facility which is designed and constructed to provide resistance to blast and fragment damage and, when applicable, to protect personnel inside from overpressure, is considered to be hardened.

**Hot Spill**—Release of toxic propellants through propellant combustion, such as a launch operation.

**Immediately Dangerous to Life or Health (IDLH)**—The current National Institute for Occupational Safety and Health (NIOSH) definition for IDLH is “a condition that poses a threat of exposure to airborne contaminants when that exposure is likely to cause death or immediate or delayed permanent adverse health effects or prevent escape from such an environment.” The level of exposure for the IDLH “is to ensure the worker can escape from a given contaminated environment in the event of a failure of the respiratory protection equipment.” The effects at these levels are based on an exposure time of 30 minutes to add a safety margin. However, workers should not stay in the environment any longer than necessary. Evacuation should take place immediately.

**Impact Limit Line (ILL)**—The line defining a limit beyond which a hazardous launch vehicle and/or payload debris shall not be allowed to impact.

**Launch Battle Staff**—Under the direction of 30 SW/CC, the 30 SW Battle Staff is formed one hour prior to launch.

**Launch Battle Staff Briefing**—Under the direction of 30 SW/CC, the LDCG Team Chief produces a briefing for the Launch Battle Staff. The briefing is conducted prior to designated launches, usually only space launches; however, a briefing will be required whenever the Launch Battle Staff forms.

**Launch Disaster Control Group (LDCG)**—A team, under the direction of 30 SW/SEGP, composed of trained technical personnel pre-positioned for rapid response to emergencies during missile or space launch operations.

**Launch Disaster Control Group Team Chief**—A 30 SW commander representative with overall responsibility for the LDCG. The individual prepares and coordinates the Launch Support Plan, and provides overall LDCG leadership. In addition, directs pre- and post-launch activities that ensure key personnel and equipment are in place and ready to support the LDCG. Also, responsible for ensuring area safety by validating the launch facility and FHA, FCA, and ILL areas are clear of all nonessential personnel prior to launch. In the event of a catastrophic launch abort failure, the Disaster Control Group On-Scene Commander will assume control of the LDCG. When relieved, the LDCG Team Chief will assist the OSC as necessary, and become the Safety representative for the DCG.

**Launch Operations Control Center (LOCC)**—A 30 SW facility used as the command center for AFSPC launch operations. This facility is used by various agencies; e.g., Test Manager, Launch Analysis personnel, civilian contractors, and other mission-essential and support personnel during AFSPC Launches.

**Launch Recovery Team**—For certain launches, the 30 SW/CC appoints a Payload Recovery Team (LRT) to form up at the fallback area with the LDCG. Though not officially part of the LDCG, the LRT's presence at the fallback area is essential if there is a catastrophic launch abort failure. Basically, the LRT recovers and secures the payload once cleared into the accident area by the OSC.

**Misfire**—Condition that exists when it is known that the ignition signal has been sent to an initiator and ignition of the initiator was not achieved.

**Mission-Essential Personnel**—The minimum number of personnel necessary to successfully and safely complete a hazardous operation and whose absence would hinder the completion of the operation.

**Mission Flight Control Officer (MFCO)**—The MFCO is responsible for overall launch hazard assessment, determines safety readiness to support the launch, and monitors checkout procedures on the Flight Termination System. The MFCO monitors the performance of launch vehicles in flight and initiates flight termination action when launch vehicles violate flight safety criteria. The MFCO, with the Senior MFCO's concurrence, provides the safety readiness GO/NO-GO decision to the ROC.

**Nonessential Personnel**—Personnel not required for successful completion of a specific operation. Also, personnel who do not meet the criterion for mission-essential or essential personnel.

**On-Scene Commander (OSC)**—This individual is responsible for command and control at the disaster site. All responding agencies or individuals at the disaster are under the command and control of the OSC.

**Operational Hazard Zone (OHZ)**—See Toxic Hazard Zone (THZ) for related definition.

**Operations Safety Manager (OSM)**—The OSM in coordination with the LDCG is responsible for ensuring the FHA, FCA, and ILL is clear. The OSM is also responsible for site safety and reports site safety status as appropriate. The OSM will have control of site aural/visual warning devices, status and alert lights and pad video. The OSM is responsible for all safety aspects of the SLC/LF and ILL to include countdown, pad clearing, and re-entry.

**Operations Safety Technician (OST)**—The designated individual appointed to assist the OSM.. The OST ensures safety functions are accomplished in a safe and healthful manner for all pre- and post-launch activities.

**Potential Hazard Zone (PHZ)**—Planning zone established prior to a specific operation to assess risk should an accidental cold spill or unplanned release, or a hot spill catastrophic abort occur. The zones are based upon the worst-case credible emission rate or source strength for a specific operation.

**Radiological Hazard Corridor**—A corridor/area established encompassing all known or suspected radiological contamination.

**Range Operations Commander (ROC)**—The ROC is the senior WR representative for launch operations and serves as the liaison between the launch agency and the WR. The ROC manages, directs, and controls WR resources, ensuring all instrumentation is capable and ready to support all phases of launch operations. This includes WR instrumentation support, contingency support requirements, aircraft and seacraft support, and support by off-range assets. The ROC certifies WR readiness and provides the launch agency the final overall WR GO/NO-GO recommendations.

**Safety Control Areas**—Areas under the control of the OSM with assistance from the OST and Security

Forces during missile build-up, hazardous operations, and pre- and post-launch activities. These areas include the LFs, SLCs, FHA, FCA, ILL, RHC, Fallback Areas, Viewing Areas, Danger and Hazard Areas.

**Safety Hold**—A directive to either prevent an operation from starting or stopping an operation already underway. Safety holds may be called if safety criteria cannot be assured or maintained, safety criteria is jeopardized, or an imminently dangerous situation exists. As necessary, the LD will react to verbal inputs from the OSM or MFCO to enter a hold or prevent launch.

**System Engineering Response Team (SERT)**—A team of technicians and advisors pre-positioned for rapid response to launch anomalies and malfunctions. This team, under the direction of the 576 FLTS/TEE, conducts on-site investigations of anomalies and hangfires for 576 FLTS launches (PK, MM).

**Tier 1**—See Toxic Hazard Zone (THZ) for related definitions.

**Tier 2**—See Toxic Hazard Zone (THZ) for related definitions.

**Tier 3**—See Toxic Hazard Zone (THZ) for related definitions.

**T-0 (T minus zero)**—For launch operations, T-0 is the opening of a launch window or planned lift-off time.

**Toxic Hazard Zone (THZ)**—A generic term that describes an area in which predicted concentration of propellant or toxic byproduct vapors or aerosols may exceed acceptable exposure concentrations expressed as “Tier 3, 2, or 1” (Tier 3 representing higher concentrations and Tier 1 the lowest). Plume predictions are based on an analysis of potential source strength, applicable human exposure limit, and prevailing meteorological conditions. THZs are plotted for potential, planned and unplanned propellant releases, and launch operations, and are referred as OHZs, PHZs and EHZs. Refer to SWI 91-106.

**Potential Hazard Zone (PHZ)**—A planning zone established prior to a specific operation to assess risk should an accidental cold spill or unplanned release, or a hot spill from a catastrophic launch abort. The zones are based upon the worst-case credible emission rate or source strength for a specific operation.

**Zone 3**—An area where the airborne concentrations of any toxic product range from a low defined by Tier 3 to an unknown high. This zone can result from either a hot or cold spill.

**Tier 3**—An airborne exposure level (maximum concentration) based on the NIOSH IDLH values. Tier 3 separates Zone 3 from Zone 2.

**Zone 2**—An area where the airborne concentrations of any toxic product are equal to or exceed Tier 2 levels but are less than Tier 3 levels. This zone can result from either a hot or cold spill.

Tier 2—An airborne exposure level (maximum concentration) which may cause short-term symptoms but which most individuals could endure without experiencing or developing irreversible or other serious health effects or symptoms which could impair their ability to take protective action. Tier 2 separates Zone 2 from Zone 1.

Zone 1—An area where the airborne concentration of any toxic product are equal to or exceed Tier 1 levels but are less than Tier 2 levels. This zone can result from either a hot or cold spill.

Tier 1:—An airborne exposure level (maximum concentration) which poses no hazard to the general population but which may affect certain sensitive individuals (e.g., asthmatics, individuals with emphysema, and certain other lung-diseased people). Tier 1 separates Zone 1 from the area where no controls are required.

Operational Hazard Zone (OHZ)—The toxic hazard zone established following an accidental cold spill, unplanned release, or normal launch or catastrophic launch abort, based upon actual or worst-case credible source strength. Zones 1, 2, and 3 are established for an OHZ as appropriate.

Emission Hazard Zone (EHZ)—The toxic hazard zone established before a planned release of propellants into the atmosphere; e.g., propellant tank venting, scrubber venting, or HCI release from solid propellant combustion during nominal launch operations. An EHZ is based upon the worst-case credible rate or source strength.

**Western Range (WR)**—The WR provides command and control, metric data acquisition, instrumentation, communications, launch support services, and real-time range operations for space launch, ICBM testing, aeronautical, aerospace and other programs originating at VAFB. The 30<sup>th</sup> Space Wing is responsible for WR operations.

**Zone 1**—See Toxic Hazard Zone (THZ) for related definitions.

**Zone 2**—See Toxic Hazard Zone (THZ) for related definitions.

**Zone 3**—See Toxic Hazard Zone (THZ) for related definitions.

## **Attachment 2**

### **LDCG TEAM CHIEF PROCESS CHECKLIST**

**A2.1.** As upcoming launches are projected, fragmentary orders and support information will be forwarded by various base agencies. After review by the Section Chief, this information will be compiled in a Launch Support Plan (LSP) folder in file cabinet under the heading of "Upcoming Missions."

**A2.2.** Check the 45-Day Missile Operations Forecast Weekly. Launch dates, missile type, OP#, LF#, SLC# and times will appear on this forecast. Keep the LSP folder cover sheet updated.



**A2.3.** Schedule the Launch Disaster Control Group (LDCG) Planning meeting not earlier than 10 calendar days prior to the launch. See attachment 2 for LDCG planning meeting checklist.

**A2.4.** Approximately 21 days prior to the launch date, begin developing the LSP. Use the information provided in the Range Schedule to develop the LSP. LSP information includes:

**A2.4.1.** LDCG planning meeting Notification List for all space launches (as appropriate).

**A2.4.2.** LDCG planning meeting attendance roster.

**A2.4.3.** Respiratory protection requirements.

**A2.4.4.** LSP for the last launch from this facility and the latest Vandenberg launch (reference only).

**A2.4.5.** Request SEY to provide the FHA/FCA and the Impact Limit Line (ILL) map.

**A2.4.6.** Obtain Health Physics Addendum/Health Hazard summary from Bio-environmental (6-7811).

**A2.5. NOTE:** If any of the above items are missing, ensure that replacements are reproduced.

**A2.5.1.** This step involves an item-by-item rewrite of the last LSP for the LF/SLC to be used. Use the above information (para 4) as needed in addition to the following sources of information.

**A2.5.2.** Operational Safety Manager (OSM), will provide this information for all Space Launches. Verify console telephone number.

**A2.5.3.** Operations Safety Technician determined by the Section Chief. Include the location (LF/SLC) phone number.

**A2.5.4.** LDCG Team Chief will verify fallback telephone number. Contact (see 45-Day Missile Operations Forecast) Launch/Mission Director and verify correct console number.

**A2.5.5.** LOCC Staff Safety Officer. Obtain room and telephone number from Section Chief for location of the LOCC Staff Safety Officer and Interim Mishap Board President.

**A2.5.6.** Aerospace Control Officer (ACO), contact 30 RANS (6-9935) to determine ACO console

phone number.

**A2.5.7.** Production Supervisor. Obtain this information from 576 MOCC (6-9061). Verify console phone number.

**A2.5.8.** Recovery Team Director (Space Lift Launches). Obtain this information from the applicable organization Launch Director.

**A2.5.9.** Review time on station reporting instructions for accuracy and applicability to the upcoming launch.

**A2.5.10.** Review T-times for applicability to the launch. Make changes as necessary.

**A2.5.11.** Verify fallback area to be used is correct.

**A2.5.12.** List only primary LDCG members that report to the operational fallback area.

**A2.5.13.** Auxiliary members, equipment, and augmentees are to be positioned outside the ILL (Auxiliary Fallback).

**A2.5.14.** Review sequence of events to ensure accuracy.

**A2.5.15.** Verify facilities listed in FHA/FCA with the map provided by SEY.

**A2.5.16.** Contact Missile Operations Support (MOS) and have them annotate the location of the roadblocks on the map.

**A2.5.17.** Contact 30 CS/SCSVC (6-3838) for photo site locations.

**A2.5.18.** Ensure all general restrictions are listed. These restrictions can be found in EWR 127-1.

**A2.5.19.** List attachments to the LSP. These include a map of the area (FHA/FCA/ILL) affected, Health Physics Addendum/Health Hazard Summary, and the fallback area parking plan.

**A2.5.20.** Section and LDCG Team Chief review the LSP for accuracy.

**A2.5.21.** Coordinate the LSP with the following agencies:

**A2.5.21.1.** 30 SW/SEO.

**A2.5.21.2.** 30 SW/SEY.

**A2.5.21.3.** 30 SW/SEGP.

**A2.5.22.** Submit the plan to the Section Chief for approval and signature.

**A2.6.** Reproduce the LSP (usually 80 copies). Ensure "FOUO" marking on LSP.

**A2.7.** Monitor the weekly operations schedule and the Range Support Schedule (RSS) for launch related activities.

**A2.8.** Contact the appropriate system Wing Office of Primary Responsibility (WOPR) to ensure chemical toilet is in place at the fallback area.

**A2.9.** Confirm launch date (SEO/SEY) and establish a date, time, and place for LDCG planning meeting.

**A2.10.** One week prior to the scheduled LDCG planning meeting, notify all agencies on the briefing notification List.

**A2.11.** Prepare LDCG Safety presentation from the LSP.

**A2.12.** Compile briefings from applicable support agencies to develop the LDCG Readiness Review (Briefing).

**A2.13.** Ensure Letter of Equipment Responsibility is received from applicable contractors. This letter is required any time high value equipment is located in the FHA/FCA during all launches.

**A2.14.** Ensure all personnel access lists are received by this office 48 hours prior to launch. As a minimum, access lists should be received from the following agencies:

**A2.14.1.** 30 SW/SEO.

**A2.14.2.** 30 CES/CEX.

**A2.14.3.** 30 SFS/SFOM.

**A2.14.4.** 30 CS/SCSVMI.

**A2.14.5.** 30 CES/CEOEL.

**A2.14.6.** 30 CES/CEF.

**A2.14.7.** 30 CS/SCMD.

**A2.14.8.** 30 TRNS/LGTO.

**A2.14.9.** 30 AMDS/SGPB.

**A2.14.10.** Range Users (Response Force).

**A2.15.** Perform fallback area communications check 48 hours prior to launch.

**A2.16.** Ensure crew rest as applicable.

**A2.17.** Establish a rendezvous time for safety personnel to depart for the fallback area. Must depart at least 30 minutes prior to fallback arrival time. Ensure the vehicle is fueled and equipment is in the vehicle to include:

**A2.17.1.** Radios and binoculars.

**A2.17.2.** LDCG Book to include:

**A2.17.2.1.** LSPs.

**A2.17.2.2.** EALs.

**A2.17.2.3.** LDCG briefing material.

**A2.17.2.4.** Evacuation Requirements.

**A2.17.2.5.** Launch Battle Staff Briefing.

**A2.17.2.6.** Recall Roster.

**A2.17.2.7.** Toxic Hazard Corridor equipment (protractor, checklist).

**A2.17.3.** Respiratory, ear protection, and flame-retardant suits (Nomex) for each member present.

### **Attachment 3**

#### **LDCG PLANNING MEETING CHECKLIST**

**A3.1.** LDCG planning meeting.

**A3.1.1.** On the day of the briefing, arrive at the scheduled room approximately 30 minutes prior to the briefing time. Prepare the room for your presentation to include a checkout of the overhead projector and computer setup.

**A3.1.2.** If classified briefing, see conducting classified briefing checklist.

**A3.1.3.** Ensure that all attendees sign the briefing attendance roster.

**A3.1.4.** Introduce yourself.

**A3.1.5.** State the purpose of the briefing.

**A3.1.6.** Identify key personnel associated with the launch.

**A3.1.7.** Identify launch information (site, operation number, launch window).

**A3.1.8.** Identify the local times for each milestone (T- ) in the LSP.

**A31.9.** Discuss post-launch actions (site securing, scrub launch).

**A3.1.10.** Identify hazardous materials. Brief personnel on Personnel Protective Equipment such as ear, respiratory, and Nomex requirements associated with the launch.

**A3.1.11.** Explain MOS roadblocks and sweeps.

**A3.1.12.** Identify photo sites.

**A3.1.13.** Identify the requirement to receive personnel access lists three duty days prior to launch.

**A3.1.14.** Identify authorized distinguished visitors, press, and base population viewing sites.

**A3.1.15.** Cover any special items.

**A3.1.16.** Introduce the briefing agencies to include:

**A3.1.16.1.** Engineering Response Team (ERT) (when applicable).

**A3.1.16.2.** System Project Office (SPO) (for applicable missile briefing).

**A3.1.16.3.** Bio-environmental Engineering.

**A3.1.16.4.** Fire Chief.

**A3.1.16.5.** Security Forces (MOS) Representative.

**A3.1.16.6.** Civil Engineering Representative.

**A3.1.16.7.** Readiness Representative.

**A3.1.17.** Discuss other support requirements as necessary.

**A3.1.18.** Summarize the briefing.

## **Attachment 4**

### **LDCG LAUNCH BATTLE STAFF BRIEFING CHECKLIST**

**A4.1.** 30 SW/XPO will contact this office by e-mail or telephone advising time, date and location of the Launch Battle Staff (LBS) and Contingency Support Staff (CSS) form-up.

**A4.2.** Ensure an OST is scheduled to support the CSS and ensure they arrive on station at T-90.

**A4.3.** Prepare the LBS briefing using portions of the LDCG planning meeting broken-down into a left and right side slide show. The right side will cover briefing information and the left will depict support information (i.e., maps):

**A4.3.1.** Right side:

**A4.3.1.1.** Introduction slide.

**A4.3.1.2.** Overview slide.

**A4.3.1.3.** On/off base evacuation areas.

**A4.3.1.4.** On-base sheltered areas.

**A4.3.1.5.** Hazard concerns.

**A4.3.1.6.** Manned locations within the FHA/FCA.

**A4.3.1.7.** Anomaly response personnel and location.

**A4.3.1.8.** Additional slide information as needed.

**A4.3.2.** Left side:

**A4.3.2.1.** Safety logo (to appear at the same time as the introduction slide).

**A4.3.2.2.** Safety logo (with overview slide).

**A4.3.2.3.** Evacuation area map.

**A4.3.2.4.** Sheltered area map.

**A4.3.2.5.** Safety logo (with hazard concerns).

**A4.3.2.6.** Manned locations map.

**A4.3.2.8.** Anomaly response personnel location.

**NOTE:** The Launch Battle Staff Safety Representative will present this briefing at the Launch Battle Staff and field any questions.

## **Attachment 5**

### **LAUNCH BATTLE STAFF SUPPORT AND LDCG TEAM CHIEF REFERENCE CHECKLIST**

**A5.1.** The Launch Battle Staff Support Guide will be used by the CSS representative during all scheduled launches. The guide consists of the following information:

**A5.1.1.** Table of Contents:

**A5.1.1.1.** Events Log.

**A5.1.1.2.** Launch Support Plan.

**A5.1.1.3.** Recall Roster.

**A5.1.1.4.** Safety Standby List.

**A5.1.1.5.** CSS Standby List.

**A5.1.1.6.** EAL.

**A5.1.1.7.** LDCG Planning Meeting Guide.

**A5.1.1.8.** Launch Battle Staff Briefing Guide.



**A5.1.1.9.** Additional Information as Required.

**A5.1.1.10.** Launch Battle Staff Seating Chart (with telephone numbers).

**A5.1.2.** Additional Materials:

**A5.1.2.1.** Protractor (used to plot Toxic Hazard Zones).

**A5.1.2.2.** Listing of frequently used telephone numbers.

**A5.1.2.3.** Notebooks.

**A5.2.** The LDCG Team Chief Reference Guide will be used by the LDCG Chief for all scheduled launches. The guide consists of the following:

**A5.2.1.** Table of Contents:

**A5.2.1.1.** Events Log.

**A5.2.1.2.** Launch Support Plan (2 copies).

**A5.2.1.3.** Access List (EAL).

**A5.2.1.4.** T-60/30 Safety Briefing.

**A5.2.1.5.** LDCG Planning Meeting Guide.

**A5.2.1.6.** Evacuation Requirements.

**A5.2.1.7.** Launch Battle Staff Briefing Guide.

**A5.2.1.8.** Launch Battle Staff Seating Chart (with telephone numbers).

**A5.2.1.9.** Recall Roster.

**A5.2.2. Additional Materials:**

**A5.2.2.1.** Protractor (used to plot Toxic Hazard Zones).

**A5.2.2.2.** Listing of frequently used telephone numbers.

**A5.2.2.3.** Notebooks.

**Attachment 6**

**T-60/30 LDCG SAFETY BRIEFING CHECKLIST**

**A6.1. T-60 Safety Briefing.**

**A6.1.1.** Provide update on launch countdown progress (green/red and why).

**A6.1.2.** Brief all personnel.

**A6.1.2.1.** ELSAs and earplugs are required/readily available.

**A6.1.2.2.** Flame-retardant suits (Nomex) will be worn by 30 SW personnel when in the FHA/FCA.

**A6.1.2.3.** Sheltering requirements during an anomaly.

**A6.1.2.4.** Alternate fall-back during an anomaly.

**A6.1.2.5.** Vehicles parking in accordance with the LSP parking plan (facing exit).

**A6.2. T-30 Safety Briefing.**

**A6.2.1.** Provide update on launch countdown progress (green/red and why).

**A6.2.2.** Brief all personnel:

**A6.2.2.1.** ELSAs and earplugs are required/readily available.

- A6.2.2.2.** Flame-retardant suits (NOMEX) will be worn by 30 SW personnel when in the FHA/FCA.
- A6.2.2.3.** Sheltering requirements during an anomaly.
- A6.2.2.4.** Alternate assembly point after an anomaly.
- A6.2.2.5.** Reflective vests or belt required in the event of an anomaly.
- A6.2.2.6.** Response to Pad/LF during nominal launch.
- A6.2.2.7.** Speed of responding units (night 35 mph).
- A6.2.2.8.** Responding agencies (order determined by LDCG Team Chief):
  - A6.2.2.8.1.** LDCG Chief/controller.
  - A6.2.2.8.2.** Security Forces.
  - A6.2.2.8.3.** Fire Department.
  - A6.2.2.8.4.** Red Team South Base: (DELTA, Phase I & II for Titan) or Securing Team for North Base (576 FLTS Electro Mechanical Team, Launch Analysis Group).
- A6.2.3.** Advise the On-Scene Commander of:
  - A6.2.3.1.** FHA/FCA/ILL areas evacuated of all nonessential personnel.
  - A6.2.3.2.** Interim Mishap Board President is in place.
- A6.3.** Ensure all vehicles are parked in accordance with the LSP parking plan (facing exit).

**Attachment 7**  
**LAUNCH ANOMALY CHECKLIST**

**A7.1.** Ensure the following Safety LDCG response actions are taken:

**A7.1.1.** Shelter all LDCG personnel.

**A7.1.2.** Contact the following:

**A7.1.2.1.** MFCO to verify outside observers status (VDL).

**A7.1.2.2.** 30 CS Support Flight to verify tracking sites status (6-3838).

**A7.1.2.3.** Affected manned locations (refer to attached listing); i.e., SVAFB Power Plant, Tranquillion Peak buildings and Slice's Operations Center to ensure accountability of all personnel and provide current status.

**A7.1.2.4.** OSM/MFCO to provide current personnel status within the ILL (VDL).

**A7.1.2.5.** Obtain debris pattern (impact location) coordinates from MFCO (VDL).

**A7.1.2.5.1.** Plot the debris pattern/THZ on footprint map.

**A7.1.2.6.** Advise all other affected agencies within the plotted area of required actions.

**A7.1.2.7.** ACO (6-4508) to obtain exact coordinates of the impact location and status of area from the 76 HF (helicopter).

**A7.1.3.** Ensure the On-Scene Commander addresses the following response actions:

**A7.1.3.1.** Readiness accounts for all sheltered LDCG personnel.

**A7.1.3.2.** ELSAs and earplugs are readily available (on person).

**A7.1.3.3.** Flame-retardant suits (Nomex) will be worn by 30 SW personnel when in the FHA/FCA.

**A7.1.3.4.** Accountability of all personnel within the ILL.

**A7.1.3.5.** Updates LDCG personnel of current status/information:

**A7.1.3.6.** All personnel will switch to the LDCG coded channel (keep radio communications/traffic to a minimum).

**A7.1.3.7.** No actions taken without the On-Scene Commander's Approval.

**A7.1.3.8.** Relocate to alternate reporting location via convoy (if applicable).

**A7.1.3.9.** Convoy Briefing:

**A7.1.3.9.1.** Order of vehicles for evacuation, (SF lead vehicle LDCG Team Chief trail).

**A7.1.3.9.2.** Lead SF vehicle use emergency lights; all other vehicles use headlights and emergency flashers.

**A7.1.3.9.3.** Use extreme caution when passing through intersections.

**A7.1.3.9.4.** Seat belts.

**A7.1.3.9.5.** Speed.

**A7.1.3.9.6.** Communication.

**A7.1.3.9.7.** Positioning of vehicles upon arrival (facing away from mishap scene).

## **Attachment 8**

### **LDCG POST-LAUNCH DOCUMENTATION CHECKLIST**

**A8.1.** POST-LAUNCH. Prepare a Launch Disaster Control Group Historical Package to be filed. This package will include a cover sheet with the following minimum attachments:

**A8.1.1.** LSP.

**A8.1.2.** LDCG Planning Meeting Notification List.

**A8.1.3.** LDCG Planning Meeting Attendance Roster.

**A8.1.4.** LDCG Planning Meeting Package.

**A8.1.5.** Task Force Activity Schedule (if applicable).

**A8.1.6.** Equipment Responsibility Letter (if needed).

**A8.1.7.** Additional Documentation Supporting the Launch.

**A8.1.8.** Mishap Investigation Report (if applicable).

**A8.1.9.** Other Appropriate Data.

**A8.2.** If any problems were uncovered during the launch, document it on the cover of the Launch Disaster Control Group Historical Package under "Problems Encountered."

**A8.3.** Take necessary corrective action to solve the problem.

**A8.4.** Personnel reviewing the package are:

**A8.4.1.** LDCG Team Chief.

**A8.4.2.** Section Chief.

**A8.4.3.** OSM.